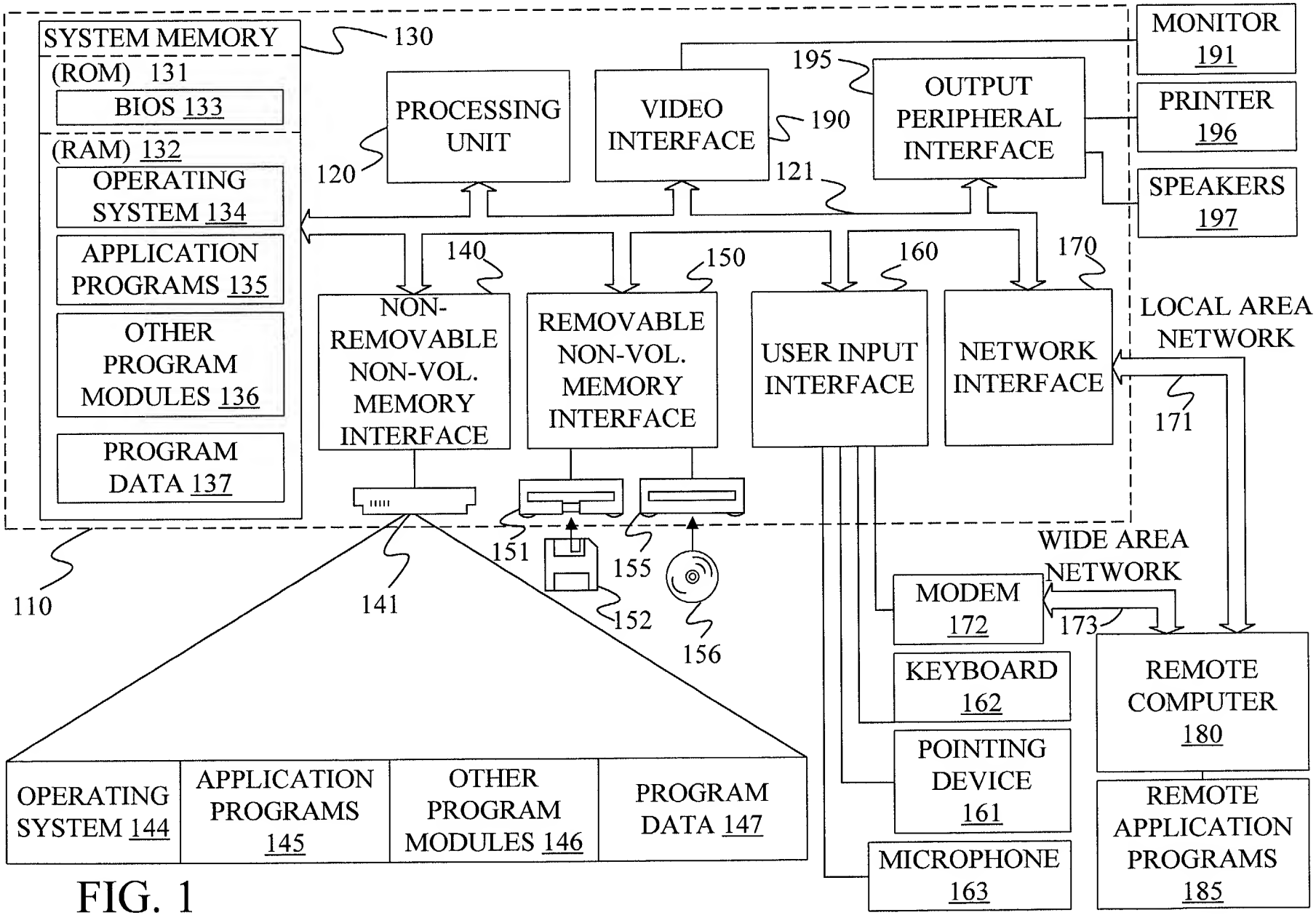
SYSTEM MEMORY
130
(ROM) 131
BIOS 133
(RAM) 132
OPERATING SYSTEM 134
APPLICATION PROGRAMS 135
OTHER PROGRAM MODULES 136
PROGRAM DATA 137
PROCESSING UNIT
120
VIDEO INTERFACE
190
195
OUTPUT PERIPHERAL INTERFACE
121
MONITOR 191
PRINTER 196
SPEAKERS 197
140
150
160
170
NON-REMOVABLE NON-VOL. MEMORY INTERFACE
REMOVABLE NON-VOL. MEMORY INTERFACE
USER INPUT INTERFACE
NETWORK INTERFACE
LOCAL AREA NETWORK
171
110
141
151
155
152
156
WIDE AREA NETWORK
MODEM 172
173
KEYBOARD 162
POINTING DEVICE 161
MICROPHONE 163
REMOTE COMPUTER 180
REMOTE APPLICATION PROGRAMS 185
OPERATING SYSTEM 144
APPLICATION PROGRAMS 145
OTHER PROGRAM MODULES 146
PROGRAM DATA 147

FIG. 1

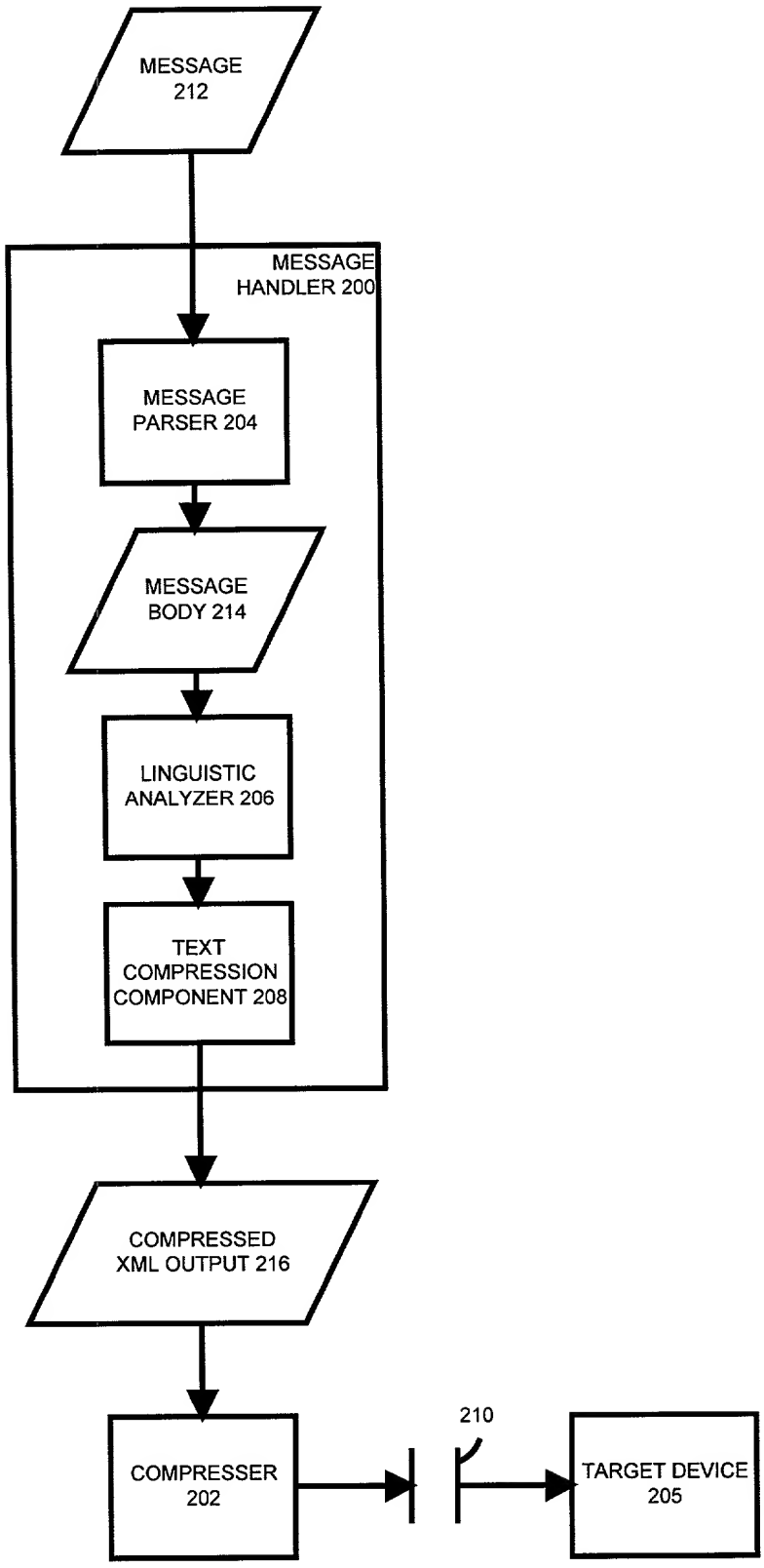
MESSAGE
212
MESSAGE
HANDLER 200
MESSAGE
PARSER 204
MESSAGE
BODY 214
LINGUISTIC
ANALYZER 206
TEXT
COMPRESSION
COMPONENT 208
COMPRESSED
XML OUTPUT 216
COMPRESSER
202
210
TARGET DEVICE
205

FIG. 2

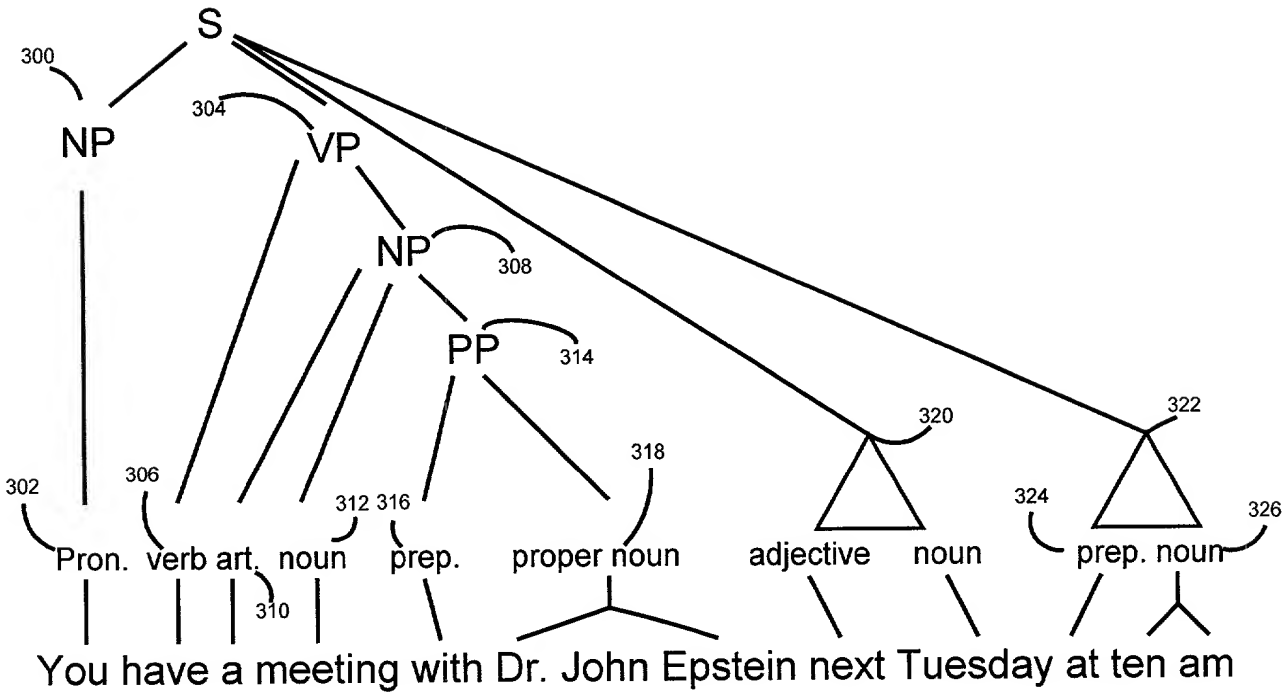
S
300
NP
304
VP
NP
308
PP
314
320
322
318
302
306
312
316
324
326
Pron.
verb
art.
noun
prep.
proper noun
adjective
noun
prep.
noun
310
You have a meeting with Dr. John Epstein next Tuesday at ten am

FIG. 3

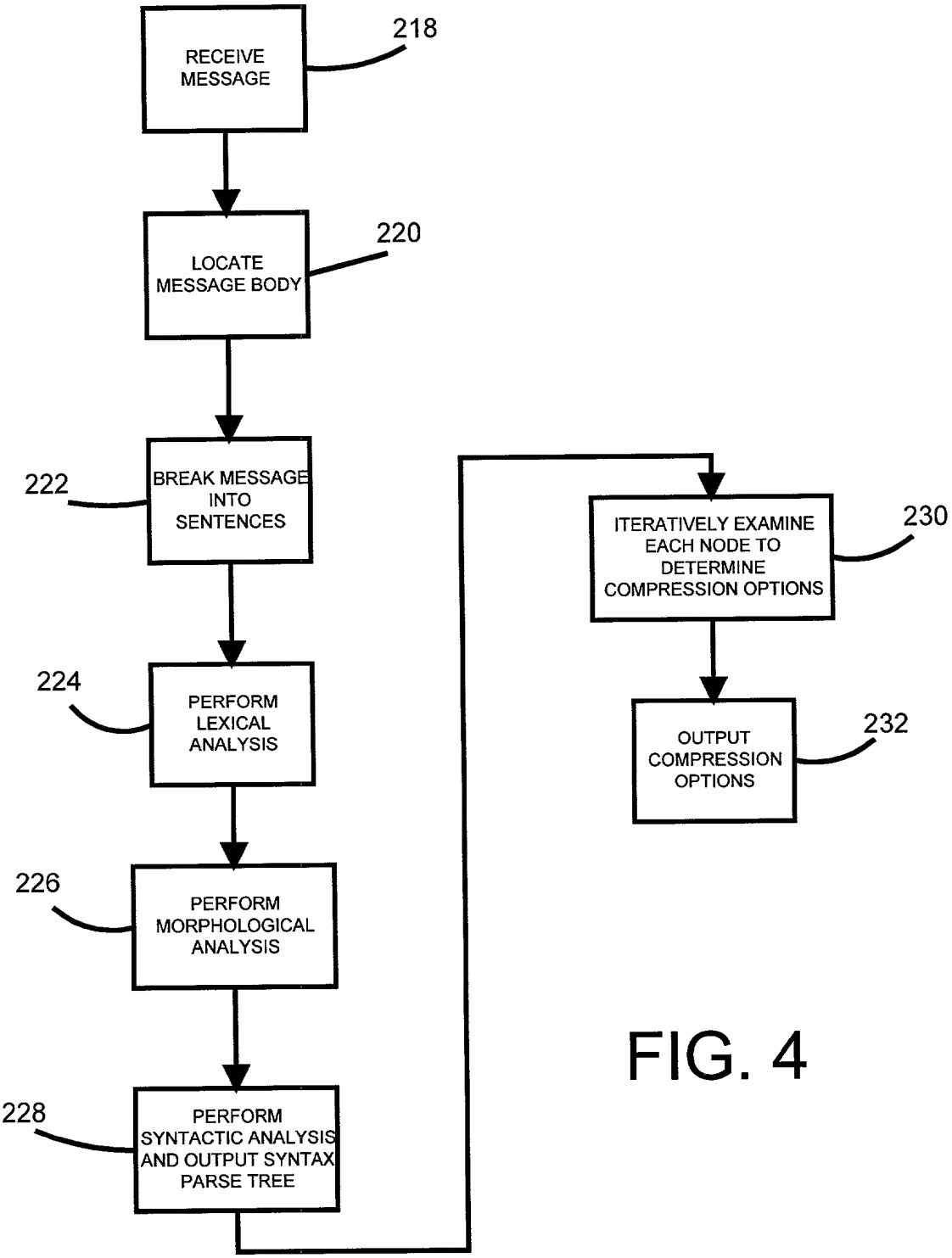
RECEIVE MESSAGE
218
LOCATE MESSAGE BODY
220
BREAK MESSAGE INTO SENTENCES
222
PERFORM LEXICAL ANALYSIS
224
PERFORM MORPHOLOGICAL ANALYSIS
226
PERFORM SYNTACTIC ANALYSIS AND OUTPUT SYNTAX PARSE TREE
228
ITERATIVELY EXAMINE EACH NODE TO DETERMINE COMPRESSION OPTIONS
230
OUTPUT COMPRESSION OPTIONS
232

FIG. 4

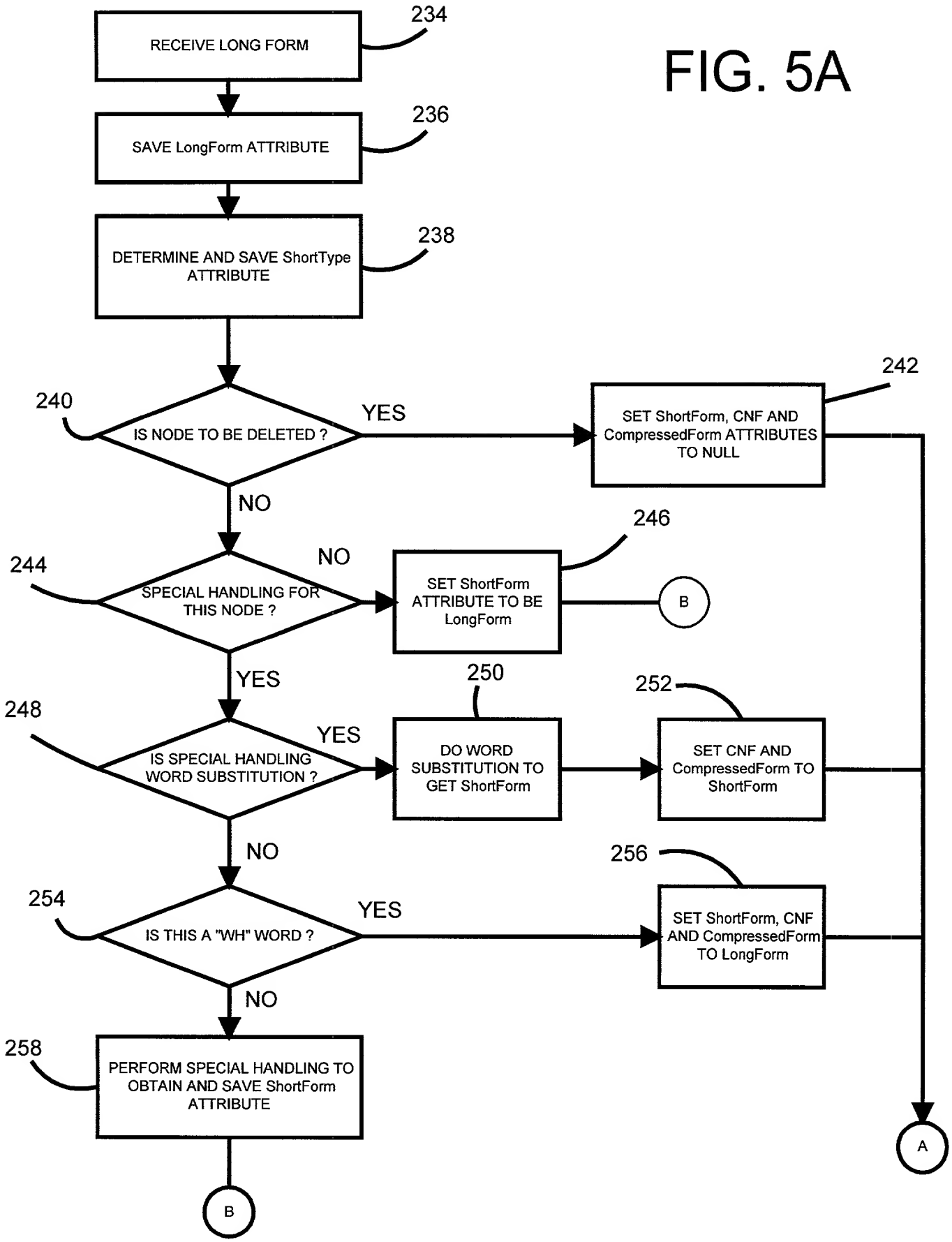
RECEIVE LONG FORM
234
SAVE LongForm ATTRIBUTE
236
DETERMINE AND SAVE ShortType ATTRIBUTE
238
240
IS NODE TO BE DELETED ?
YES
242
SET ShortForm, CNF AND CompressedForm ATTRIBUTES TO NULL
NO
244
SPECIAL HANDLING FOR THIS NODE ?
NO
246
SET ShortForm ATTRIBUTE TO BE LongForm
B
YES
248
IS SPECIAL HANDLING WORD SUBSTITUTION ?
YES
250
DO WORD SUBSTITUTION TO GET ShortForm
252
SET CNF AND CompressedForm TO ShortForm
NO
254
IS THIS A "WH" WORD ?
YES
256
SET ShortForm, CNF AND CompressedForm TO LongForm
NO
258
PERFORM SPECIAL HANDLING TO OBTAIN AND SAVE ShortForm ATTRIBUTE
B
A

FIG. 5A

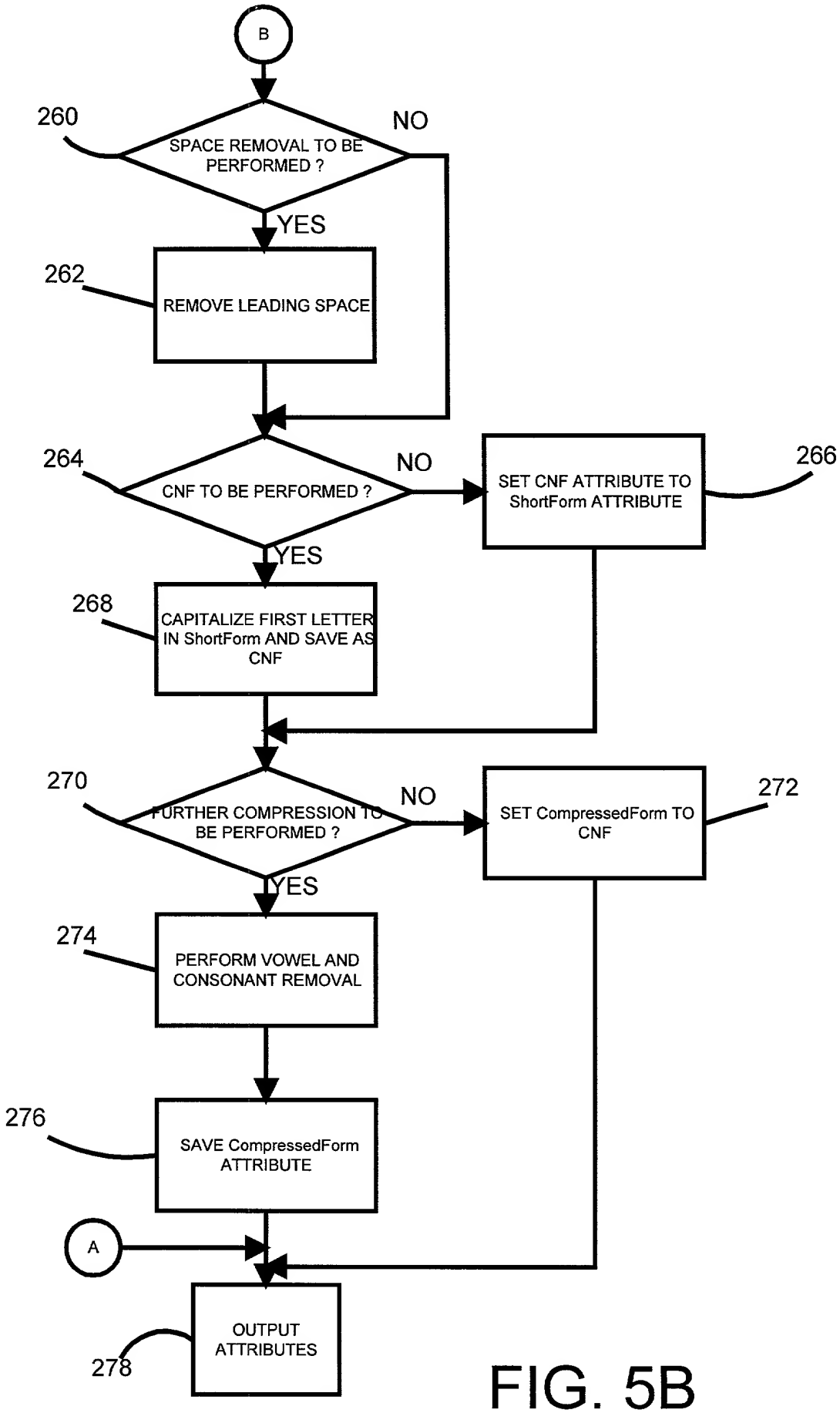
B
260
SPACE REMOVAL TO BE PERFORMED ?
NO
YES
262
REMOVE LEADING SPACE
264
CNF TO BE PERFORMED ?
NO
SET CNF ATTRIBUTE TO ShortForm ATTRIBUTE
266
YES
268
CAPITALIZE FIRST LETTER IN ShortForm AND SAVE AS CNF
270
FURTHER COMPRESSION TO BE PERFORMED ?
NO
SET CompressedForm TO CNF
272
YES
274
PERFORM VOWEL AND CONSONANT REMOVAL
276
SAVE CompressedForm ATTRIBUTE
A
OUTPUT ATTRIBUTES
278

FIG. 5B